



# Investing in Salmon Recovery

A Report by the Washington State  
Salmon Recovery Funding Board

2002-2004



**Cover photo:** The Wenatchee River as it runs through Tumwater Canyon upstream from Leavenworth. The Salmon Recovery Funding Board has funded several projects in this area.

© Rollin Geppert



**Left photo insert:**

The North Olympic Salmon Coalition planted trees along the shore and placed large root wads and logs in the lower east fork of Chimacum Creek in Jefferson County to create better habitat for salmon.



**Right photo insert:**

Chinook salmon in the Columbia River taken by Geoffrey McMichael.

## Salmon Recovery Funding Board

The Board supports salmon recovery by funding habitat protection and restoration projects. It also supports related programs and activities that produce sustainable and measurable benefits for fish and their habitat.

### Contact Information

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# Overview

## INVESTING IN SALMON RECOVERY



**William D. Ruckelshaus**  
*Salmon Recovery Funding Board  
Chairman*

**"This is a grassroots effort. Citizens are deciding what the priorities are for their watersheds. The projects they develop are reviewed by scientists to ensure the best ones are funded. We've made great progress but our work has just begun. Rescuing salmon from the brink of extinction will take a sustained commitment from all levels of society."**

### Why We Need Salmon Recovery

In 1991, the federal government put a Washington salmon population on its list of species that are endangered or threatened with extinction. In the next few years, more salmon and trout populations were listed. By 1999, wild salmon disappeared from 40 percent of their historic breeding grounds in Washington, Oregon, Idaho, and California. There was no indication that this trend would be reversed without drastic action. The endangered species listings set off a series of actions that resulted in the Legislature creating a package of programs to address salmon recovery, including forming the Salmon Recovery Funding Board to ensure wise investment of both federal and state funding for salmon recovery.

### The Status of Salmon Today

Recovering salmon populations is complicated work, involving all levels of government from local to federal, tribes, businesses, and people working in their own communities. Together, much has been accomplished since the first listing of salmon. Gov. Gary Locke helped renegotiate international treaties to protect the most endangered fish and more fairly distribute the catch for anglers. The state developed a strategy to recover salmon and Congress established a federal fund to pay for salmon protection and restoration work. Regional groups

formed to develop recovery plans and local groups began hundreds of projects to protect and restore salmon populations. These efforts have had a positive effect. According to the Governor's *2004 State of Salmon in Watersheds Report*, since 1999 federal, state, regional, and local organizations combined have:

- ◆ Returned more than 300,000 acre-feet of water to streams where salmon need it.
- ◆ Removed more than 1,480 fish barriers and opened more than 1,600 miles of habitat to salmon for spawning and rearing.
- ◆ Contributed more than 150,000 hours of volunteer time serving on task forces, restoring salmon habitats, and participating in other efforts.

### What is the Salmon Recovery Funding Board?

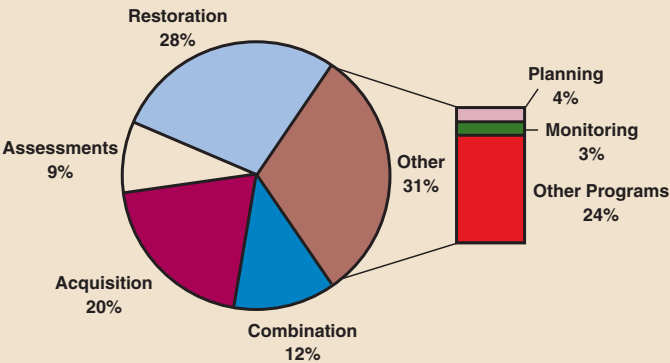
The Salmon Recovery Funding Board was created by statute and is made up of five citizens and five state agency directors. It is charged with administering federal and state grants to local communities for the protection and restoration of salmon and salmon habitat. Each local community selects a county, city, conservation district, special district, tribe, or other organization to serve as its lead entity. Lead entities assess the needs of salmon and develop strategies for their recovery in the lead entity area, which covers one or more watersheds

# Overview

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or Water Resource Inventory Areas (WRIA). Armed with a strategy, lead entities then solicit citizens and organizations to develop projects that will meet the needs identified by the strategies. Lead entities form technical and citizen committees to review projects. Support is provided by the Washington Department of Fish and Wildlife. The lead entities rank their projects and submit lists to the Salmon Recovery Funding Board for consideration for funding.

**Funded Project Types  
Percent of \$195.4 Million Total  
2000-2004**



### How is the Money Spent?

The Salmon Recovery Funding Board's panel of experts reviews the project lists submitted by lead entities. The

panel evaluates lead entity strategies and looks at how the projects fit the strategies. From 2000-2004, the Board has awarded grants for 592 projects to organizations, landowners, tribes, local governments, and nonprofits in 30 of the 39 counties, totaling \$195.4 million. Projects and activities funded include the following:

- ◆ Habitat restoration
- ◆ Habitat protection through acquisition
- ◆ Assessments and feasibility studies
- ◆ Monitoring
- ◆ Planning (regional salmon recovery plans)

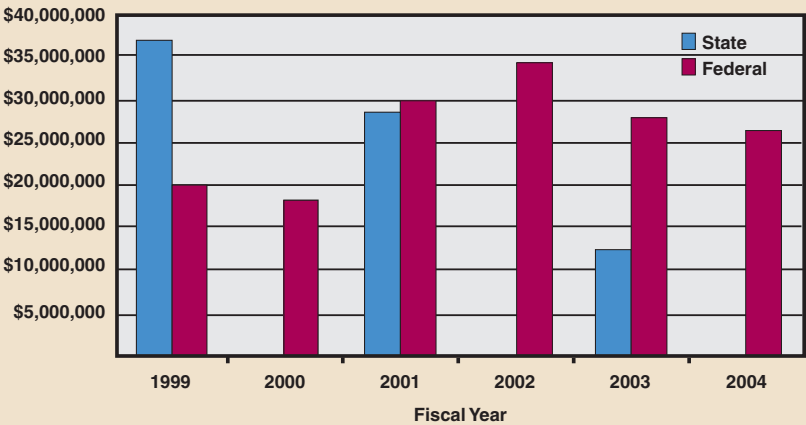
### Contributions from Local Partners

While the Salmon Recovery Funding Board requires a 15 percent match, grant recipients have far exceeded that by providing nearly 40 percent or \$76 million in matching money, donations, and services.

### What are the Funding Sources?

Funding for the Salmon Recovery Funding Board grants and other activities comes from the Washington State Legislature, through the sale of state general obligation bonds, and from the U.S. Congress through the Pacific Coastal Salmon Recovery Fund.

**Appropriations to the  
Salmon Recovery Funding Board  
State and Federal \***

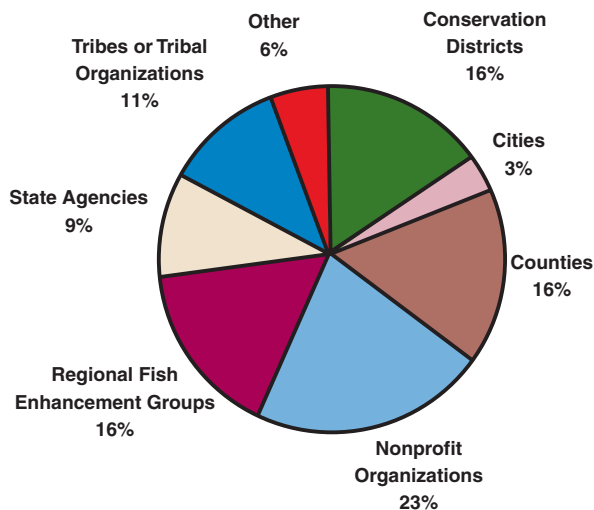


\* The federal government appropriates money annually and the state Legislature appropriates money biennially.

# Accomplishments

## INVESTING IN SALMON RECOVERY

**Projects by Sponsor Type  
Percent of 592 Total Projects  
2000-2004**



### Funding Local Projects

The Board has completed five rounds of grant funding since 2000. Following are highlights of other Board accomplishments.

### Improving Salmon Habitat

We know that salmon need cool, clean water to survive. We also know that they need to return to the streams where they were born to spawn. Since 2000, the Salmon Funding Recovery Board has funded projects that have:

- ◆ Fixed or removed 132 barriers to fish migration, opening up an estimated 456 miles of streams for salmon habitat.
- ◆ Planted trees and shrubs along 96 miles of streams to cool the water and provide sources of wood. The wood falls into the streams and creates cover and pools where salmon can rest.
- ◆ Abandoned or fixed 222 miles of road to reduce the amount of sediment washing into streams.
- ◆ Changed river flows in 85 acres to slow the rivers and create places for salmon to spawn and grow.
- ◆ Worked with willing landowners statewide to protect habitat through conservation easements and property acquisitions.

- ◆ Removed 19 dikes and tide gates in estuaries to allow freshwater and saltwater to mix, opening an estimated 6 miles of transition areas for salmon headed to and from the sea.
- ◆ Awarded \$17 million to many local governments, tribes, and other organizations to conduct inventories and assessments of habitat, measure the extent of problems, and design projects to correct those issues.

### Monitoring Ensuring Projects are Working

To ensure that projects are making a difference to fish, the Salmon Recovery Funding Board supports monitoring in several ways. Selected projects across the state are being



*A Chinook salmon swims away in the middle fork of the Nooksack River in Whatcom County, the site of a project funded by the Salmon Recovery Funding Board.*

# Accomplishments

## INVESTING IN SALMON RECOVERY

studied to see which kinds of protection and restoration actions are the most effective. More intensive monitoring in selected watersheds also is being done to quantify changes in salmon populations resulting from restoration actions. State agencies are working together through the Governor's Forum on Monitoring Salmon Recovery and Watershed Health to ensure that monitoring of state salmon recovery actions is well coordinated. The Board also participates in the Pacific Northwest Aquatic Monitoring Partnership to coordinate monitoring actions in Washington with efforts in other states and by federal and tribal government agencies.

### Protecting Valuable Salmon Habitat

When citizen groups and local agencies have decided the right thing to do for salmon is protect the best remaining habitat, they seek grants to secure conservation easements or land purchases. When supported by these local strategies and priorities, the Salmon Recovery Funding Board has given grants to protect some of the most pristine salmon habitat, as long as the landowner is willing.

### Supporting Development of a Grassroots Salmon Recovery Structure

The Board funds the operations of 26 lead entities. They are charged with developing local strategies for salmon



*Crews measure bugs, as indicators of food for salmon, in Issaquah Creek.*

recovery and recruiting projects to accomplish those strategies. The Board also has provided \$5.3 million to five of the state's seven salmon recovery regions to establish citizen-led boards and develop locally based salmon recovery plans. The Lower Columbia Fish Recovery Board completed



*Workers plant trees along the Yakima River to provide shade and cool the water for salmon.*

its recovery plan for the southwest portion of the state, the first in Washington, and the other recovery regions are expected to follow by June 2005.

### Emphasizing Areas Important to Salmon

The Board funded 43 marine nearshore projects in the past two grant rounds totaling \$11.8 million. Nearshore ecosystems are part of the life support system that salmon depend on. They are the places where salmon make the transition between freshwater spawning and rearing habitats and saltwater feeding habitats.

Degradation of nearshore ecosystems has been identified as one of the factors contributing to the decline of salmon populations in the region. Implementation of recovery actions in nearshore ecosystems is often hindered by our lack of knowledge of salmon in these areas, how these ecosystems function, how salmon respond to both positive and negative changes there, and how natural

*Smolts get counted as part of a Stillaguamish Tribe project to study Chinook salmon migration.*





# Accomplishments

## INVESTING IN SALMON RECOVERY

and human-caused factors affect the sensitive ecosystems. Consequently, much of the funding the Board has awarded for nearshore efforts has been for assessments that increase our understanding of nearshore functions, conditions, and salmon needs. The Board also has funded projects that have begun to restore these areas, such as removing dikes, bulkheads, abandoned fishing gear, and tide gates.

### **Jointly Managing a Program to Correct Barriers to Fish on Private Family Forestland**

The Board has supported a program that provides funding to eligible forest landowners to improve fish passage where forest roads cross streams on their lands. The law requires forest landowners to correct barriers to fish passage on their property to help salmon use available habitat.

This grant program, which was created in response to the law and is administered jointly with the departments of Natural Resources and Fish and Wildlife, provides technical assistance as well as funding to help family forest landowners meet their obligations. To date, 36 projects have been funded, totaling \$1.06 million and opening 58 miles of fish habitat.

### **Supporting a Small Grants Program to Help Local Organizations**

Recognizing that there were many projects that were very small and did not have the resources to compete, the Board joined with the National Fish and Wildlife Foundation to create a small grants program. To date, \$300,000 in Salmon Recovery Funding Board grants, matched with \$300,000 in foundation funds have been awarded to 24 projects in four pilot areas of the state. These projects include planting sections of river shoreline, building fences, removing invasive weeds, and fixing culverts. The pilot project was so successful that the Board broadened the program in early 2005 to be statewide.

### **Centralizing Information About Salmon Recovery**

The Board has encouraged development of an online data portal that allows citizens and project managers access to salmon information held by 12 state agencies. Citizens can find out what types of salmon exist in their rivers and where the streams, dams, and toxic waste sites are, all with a few clicks of their computer mouse button. These data, as well as 130 other data sets, are accessible to the public and all levels of government. Visit: [www.swim.wa.gov](http://www.swim.wa.gov). In addition, the Board uses a state-of-the-art project information system (PRISM) for grant programs that

allows staff to quickly answer questions about projects and expenditures. PRISM allows much of the application process to be done online, saving time and resources. It also stores monitoring information to help track recovery actions. Visit: [www.iac.wa.gov/oia/prism.htm](http://www.iac.wa.gov/oia/prism.htm).

### **Other Activities**

- ◆ Supported the Department of Ecology's efforts to save water to benefit salmon.
- ◆ Supported the Department of Natural Resources as it enforces logging rules under the "Forest and Fish Agreement," writes habitat conservation plans for forests to protect salmon and other endangered animals, and maps streams.



*A fish swims freely in Kitsap County's Hart Creek after a barrier culvert was removed.*

# Local Groups Develop Projects: Three Case Studies

## INVESTING IN SALMON RECOVERY



*A worker ties together logs for placement in the middle fork of the Nooksack River in Whatcom County.*

### Creating Better Salmon Habitat

The Nooksack Salmon Enhancement Association received a grant of \$117,000 and matched it with \$29,000 to restore and protect the spawning and rearing conditions in a 3,500-foot-long, spring-fed, channel of the middle fork of the Nooksack River in Whatcom County. The channel is used by Chinook salmon, which are listed as threatened with extinction under the federal Endangered Species Act, as well as steelhead, wild coho, and pink salmon. Using a helicopter and excavator, the group improved the conditions for salmon by placing 200 pieces of large woody debris in the channel. The large logs create pools, which salmon rely on to hide from predators and to rest.

*By providing shade and resting areas, the logs create better spawning and rearing conditions for Chinook salmon.*



### Changing How a River Flows

The Yakima River flows swiftly past Tree Top Inc.'s plant in Yakima. The fruit juice maker generates wastewater as a result of processing fruit. That wastewater is used to irrigate a pasture on the Yakima River shoreline and eventually makes its way into the river, home to Chinook salmon and steelhead. With the help of a Salmon Recovery Funding Board grant of \$92,000 and a local match of \$42,000, Tree Top was able to reshape the slope of the river bank and stop it from eroding. The company



*Rocks are placed along the bank of the Yakima River to reduce erosion.*

used large equipment to lower the bank and place large rocks and tree root wads along the river to stabilize the bank. It planted trees along the shore to shade the river and provide a buffer between the irrigated field and the river. Tree Top also removed the livestock from the field and converted it to hay production.



**After:**  
*A new bridge provides easy passage for fish.*

### Removing Fish Migration Barriers

The Lewis County Public Works Department used a Salmon Recovery Funding Board grant of \$290,000 and matched it with \$82,000 to replace a culvert that was too small and set too high from the river, preventing young salmon from migrating upstream. The culvert was on Hanaford Creek, a tributary to the Skookumchuck River near Centralia, and home to steelhead, coho salmon, and cutthroat trout. The county replaced the culvert with a bridge, reshaped the streambed, placed tree root wads in the river to slow it down, and planted trees along the bank. The work opened 7.4 miles of spawning and rearing habitat. Volunteers and the county are monitoring the fish populations.

**Before:**  
*Measurements are taken of the drop of an old outfall that is a barrier to fish migration on Hanaford Creek in Lewis County.*





# Partners in Saving Salmon

“Local groups are the heart and soul of salmon recovery. Without their efforts, we would not be making the strides we are today.”

William D. Ruckelshaus  
Salmon Recovery Funding Board

## INVESTING IN SALMON RECOVERY

### Salmon Recovery Funding Board

#### Board members

William D. Ruckelshaus, Chair, *Seattle*  
Frank “Larry” Cassidy, Jr., *Vancouver*  
Brenda P. McMurray, *Yakima*  
James L. Peters, *Olympia*  
Steve Tharinger, *Clallam County*

#### Agency members

Department of Ecology  
Department of Fish & Wildlife  
Department of Natural Resources  
Department of Transportation  
Washington Conservation Commission

#### Office of the Interagency Committee

Laura Johnson, Director

#### Following is a list of the Salmon Recovery Funding Board's partners in salmon recovery:

Adopt A Stream Foundation  
Agnew Irrigation District  
Asotin County Conservation District  
AWISH (A World Institute for a Sustainable Humanity)  
City of Bainbridge Island  
Bainbridge Island Land Trust  
City of Bellevue  
City of Bellingham  
Blue Mountain Land Trust  
City of Bremerton  
Port of Bremerton  
Broughton Land Company  
City of Burien  
Capitol Land Trust  
Cascade Land Conservancy  
City of Centralia  
Chehalis Basin Fisheries Task Force  
Chehalis Tribe  
Chelan County  
Chelan County Conservation District  
Chelan County Public Utilities District  
Chelan/Douglas Land Trust  
Chewuch Basin Council  
Chewuch Canal/Fulton Ditch Company  
Clallam County  
Clallam Conservation District  
Clark Conservation District  
Clark County  
Coastal Resources Alliance  
Columbia Conservation District  
Columbia County  
Columbia Land Trust  
Columbia Pacific Resource Conservation & Development  
Colville Confederated Tribes  
Concurrent Technologies Corporation  
Washington State Conservation Commission  
Cowie Canyon Conservancy  
Cowlitz County  
Cowlitz Game and Anglers  
Cowlitz-Wahkiakum Conservation District  
CREST (Columbia River Estuary Study Taskforce)  
Ducks Unlimited Inc.  
Washington Department of Ecology  
City of Everett  
City of Federal Way  
Fish First  
Washington Department of Fish & Wildlife  
Foster Creek Conservation District  
Friends of the East Fork Lewis River  
FRIENDS of the San Juans  
Grays Harbor County  
Grays River Habitat Enhancement District  
Great Peninsula Conservancy  
Hood Canal Coordinating Council Inc.  
Hood Canal Salmon Enhancement Group  
Town of Lone  
Island County  
Island County Marine Resources Commission  
Jamestown S’Klallam Tribe  
Jefferson County  
Jefferson County Conservation District  
Jefferson Land Trust  
Kalispel Indian Tribe  
City of Kent  
King County  
King County (WRIA 8)  
King County (WRIA 9)  
Kitsap Conservation District  
Kitsap County  
Kittitas County Conservation District  
Klickitat County  
City of Lacey  
Lake Chelan Sportsman’s Association  
Lewis County  
Lewis County Conservation District  
Liberty Bay Foundation  
Lower Columbia Fish Recovery Board  
Lower Columbia River Fisheries Enhancement Group

# Partners in Saving Salmon

## INVESTING IN SALMON RECOVERY

Lower Elwha Klallam Tribe  
Lummi Indian Business Council  
Makah Tribal Council  
Mason Conservation District  
Mason County  
Maxwelton Salmon Adventure  
Merrill & Ring  
Methow Conservancy  
Methow Salmon Recovery Foundation  
Mid-Columbia Regional Fisheries Enhancement Group  
Mid-Puget Sound Fish Enhancement Group  
MountainStar Conservation Trust  
City of Mount Vernon  
National Fish & Wildlife Foundation  
Washington Department of Natural Resources  
Nisqually Indian Tribe  
Nisqually Land Trust  
Nisqually River Salmon Recovery  
Nooksack Indian Tribe  
Nooksack Salmon Enhancement Association  
Nordheim Family  
North Central Washington Resource Conservation & Development  
North Olympic Land Trust  
North Olympic Peninsula Lead Entity  
North Olympic Salmon Coalition  
Northwest Service Academy  
Northwest Watershed Institute  
North Yakima Conservation District  
NW Straits Marine Conservation Foundation  
City of Okanogan  
Okanogan Conservation District  
Okanogan County  
Okanogan Irrigation District  
Pacific Coast Salmon Coalition  
Pacific Conservation District  
Pacific County  
Pacific Watershed Institute  
Pend Oreille Conservation District  
Pend Oreille County  
People for Puget Sound

Pierce County  
Pierce County Conservation District  
Point No Point Treaty Council  
Pomeroy Conservation District  
Port Gamble S'Klallam Tribe  
City of Poulsbo  
Puget Sound Salmon Forum  
Puget Sound Shared Strategy  
Puyallup Tribe  
Quileute Tribe  
Quinault Indian Nation  
Renton Lions Club  
Samish Nation  
San Juan Conservation District  
Sea Resources  
City of Seattle  
Seattle City Light  
City of Selah  
Sequim Prairie Tri-Irrigation  
Skagit Conservation District  
Skagit County  
Skagit County Dike District #3  
Skagit Fish Enhancement Group  
Skagit Land Trust  
Skagit River System Cooperative  
Skagit Watershed Council  
Skamania Land Owners Association  
Skokomish Indian Tribe  
Snake River Salmon Recovery Board  
Snohomish County  
Snohomish County Conservation District  
Snohomish Lead Entity  
South Central Washington Resource Conservation & Development  
South Puget Sound Salmon Enhancement Group  
Sportsmen's National Land Trust  
Squaxin Island Tribe  
Washington State Parks and Recreation Commission  
Stillaguamish Flood Control District  
Stillaguamish Indian Tribe  
Stillaguamish Lead Entity

Suquamish Tribe  
Surfrider Foundation  
Swinomish Indian Tribe  
Tacoma Water  
Tetra Tech FW Inc.  
The Nature Conservancy  
Thurston County  
Thurston County Conservation District  
Thurston Regional Planning Council  
Tree Top Inc.  
Tri-State Steelheaders Inc.  
Trout Unlimited Icicle Valley  
Tulalip Tribe  
City of Tumwater  
Umatilla Confederated Tribe  
Underwood Conservation District  
University of Washington  
City of University Place  
Upper Columbia Regional Fisheries Enhancement Group  
Upper Columbia Regional Salmon Recovery Board  
Upper Skagit Tribe  
U.S. Fish & Wildlife Service  
City of Vancouver  
Wahkiakum County  
Walla Walla County  
Walla Walla County Conservation District  
Washington Trout  
Whatcom County  
Whatcom Land Trust  
Wild Olympic Salmon  
Wild Salmon Center  
Willapa Bay Regional Fisheries Enhancement Group  
Wolf Creek Reclamation District  
Yakama Nation  
City of Yakima  
Yakima County  
Yakima Greenway Foundation  
Yakima River Basin Salmon Recovery Board  
Yakima Sub-basin Fish and Wildlife Planning Board  
Yakima Valley Restitution Center

# Partners in Saving Salmon

## INVESTING IN SALMON RECOVERY



Max Albert, with the Stillaguamish Flood Control District, stands next to fencing installed to keep cows out of the river. The district received a \$253,520 grant from the Salmon Recovery Funding Board and matched it with \$217,670 in donated labor and a federal grant to re-establish freshwater flow in the Stillaguamish River Old Channel, in northwest Snohomish County, near Stanwood.

The district installed a one-of-a-kind, flow-enhancement structure at the channel's entrance at Hatt Slough to capture river water and force it downstream to refresh the channel where the water is otherwise too warm and has too little oxygen for fish to survive in the summer.

In addition, aided by the Snohomish Conservation District, there were 17,000 native trees and shrubs planted along the Old Channel, which meanders 8.5 river miles from Hatt Slough, past Stanwood, to Port Susan and Skagit Bay. The river is home to Chinook, coho, and chum salmon, and trout. The Stillaguamish Tribe co-sponsored the project.

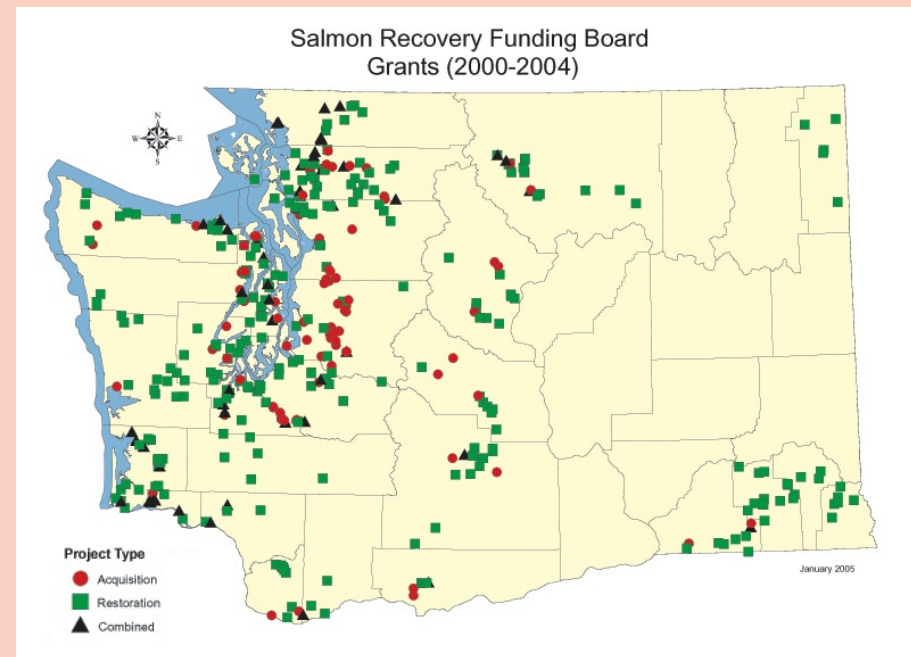


"Our Salmon Recovery Funding Board grant made possible a partnership with a willing landowner, local conservation groups, and government entities to help restore and protect a productive steelhead bearing system. We are proud of this project, and are grateful for the support provided by the Salmon Recovery Funding Board."

Brian Burns

Brian Burns, with Tri State Steelheaders Inc., stands on the site of the group's latest project in southeastern Walla Walla County. The Tri-State Steelheaders received a \$294,478 grant from the Salmon Recovery Funding Board and matched it with \$52,000 in donated equipment and labor and another grant to protect and enhance spawning and rearing habitat in the south fork of Coppei Creek. The creek is home to steelhead trout, which are listed as threatened with extinction under the Endangered Species Act.

The group purchased the development rights for nearly 280 acres, fenced 2 miles of the creek to prevent livestock from entering, and restored 126 acres of buffer along the creek by replanting areas damaged by cattle grazing. The group also placed rocks in the creek along the stream bank to create pools where steelhead can spawn, rest, and hide from predators. The project had wide volunteer support with 126 people donating nearly 400 hours to weed, replace damaged plants, and attach deer guards to plants in the buffers.







## MISSION

The Board supports salmon recovery by funding habitat protection and restoration projects. It also supports related programs and activities that produce sustainable and measurable benefits for fish and their habitat.